

FIG. 1

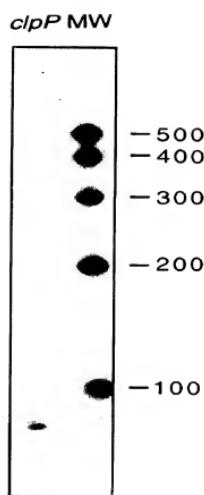


FIG. 2A

FIG. 2B

A C G T W G



rpoBMW

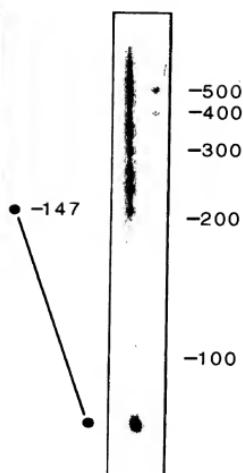


FIG. 3A

FIG. 3B

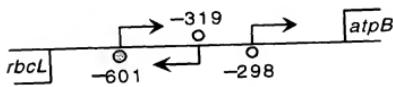
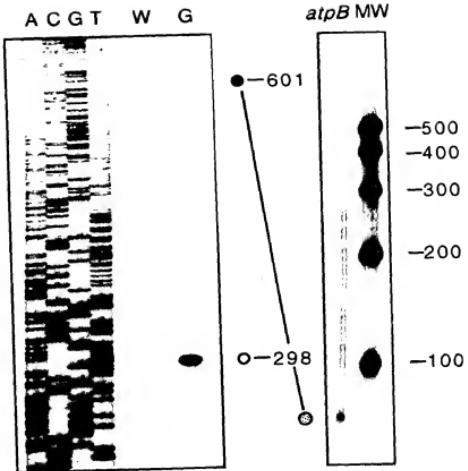


FIG. 4C

rpoB GACTGTTTATCAATTCACTTTATTCCATTCAACCCCTGCTAAATTGAACTTTGTC
atpB TTGCAAAAATCTAAAAAAATGATAATTAAATTAAATCAACTCATTAAATAAAAAAGGAG
clpP ATCACGGATTCTTTCTTTATTCAATCTGTTACCTCCTATATGTAGAATATTTC
Box II Box I

rpoB GAAATCGTCTCATATGTGAAATACATATATGAAAATACGTATGTGGAGTTCCCT
atpB TATGCTTAAGTTAAT-GAATATGTTCAATTCAATATATAATGTGTACACCCGTGTACGTT
clpP AATCTATGTATTAAATAGAATCTATAGTATTCTTATAGAATAAGAAAAAAAAATGAAGAT

rpoB AGAATTCATGTGATTCACTAAACAGAAT
atpB CTATCCTATAGGAATTACTATAGGAAT
clpP AATAAACTGCAGATTCTTTCTCTCTTC

FIG. 5A

	<i>atpB</i>
Maize	TAAGTTAATGAAATATGTTCAATTCAATATATAATGTGACACC
Sorghum	TAAGTTAATGAAATATGTTCAATTCAATATATAATGTGACACC
Barley	TAAGTTAATGAAATATGTTCAATTCAATATATAATGTGACACC
Wheat	TAAGTTAATGAAATATGTTCAATTCAATATATAATGTGACACC
Rice	TAAGTTAATGAAATATGTTCAATTCAATATATAATGTGACACC

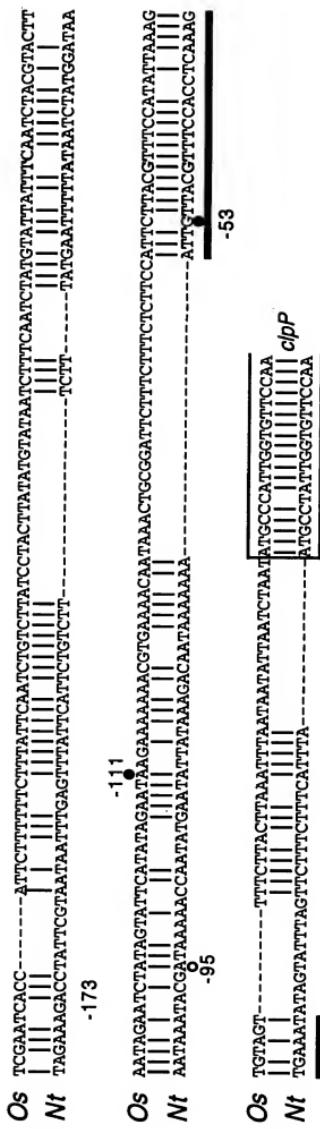
FIG. 5B

	<i>rpoB</i>
Maize	CTCTATTCAATGATGAAATACATATATGAAATACGTATG
Rice	CTCTATTCAATGATGAAATACATATATGAAATACGTATG

FIG. 5C

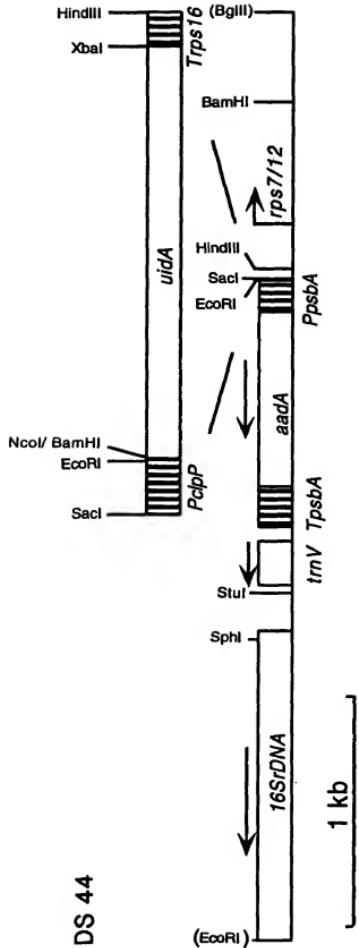
	<i>clpP</i>
Maize	TTAATAGAACATAGTATTCTTATAGAATAAGAAAAAA
Rice	TTAATAGAACATAGTATTCTTATAGAATAAGAAAAAA
Wheat	TTAATAGAACATAGTATTCTTATAGAATAAGAA■AAA

FIG. 5D



6
FIG.

DS 44



SacI

GAGCTCGAAATCACCATTCTTTTCTTTATTCAATCTGTCTATCTGTCATCTGTCATTCTGTTCAAGAATTCACTGTTAGGGAGGGATCCCTGG

AGAATCTATACTTATCATAGAATAAGAAAAACCTGAAAACAATAAAACTGGGATTCCTTCCTTCATTCATTCTAACGTTCCATAATTAAAGCTGT

AGTTTCTTACTTAATTAAATAATTCTAATATGCCATTGTTCAAGAATTCACTGTTAGGGAGGGATCCCTGG
EcoRI
NcoI

FIG. 7

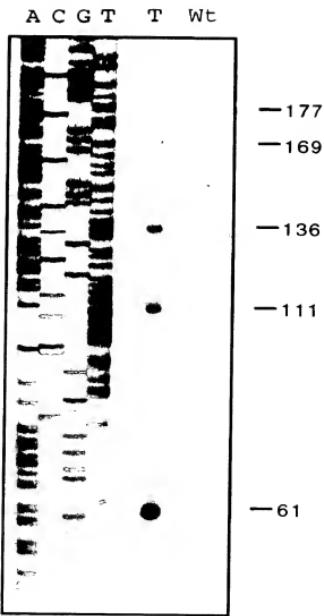


FIG. 8A

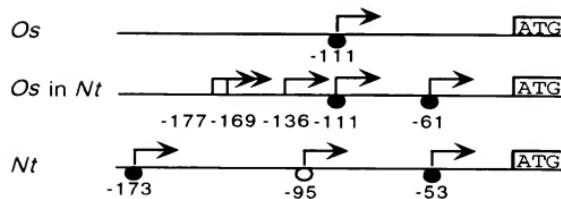


FIG. 8B

Seq.
ID
#18 Marchantia TAAATAAAATAGAATTCTATTTTACGTTTTTTATTAAG
#19 Pinus TGTACACAACCTCATATACTTTACGTTGCCATTATTAAG
#20 Spinach TAAAGACAATAACCGTAATTATTACGTTTCCACATCAAAG
#21 Tobacco TAAAGACAATAAAAAAAATTTACGTTTCCACATCAAAG
#22 Rice *TTCTTTCTTCCTTCCATTCTTACGTTTCCATATTAAAG
#23 Maize TTCTTTCTTCCTTCCATTCTTACGTTTCCATATTAAAG
#24 Arabidopsis TTAAAAAAACGAAACCCCATTTTACGTTTCCACATCAAAG

Marchantia AAGACTTATT-TTGTTTG--TGGAAAGAAAAAAATGCCT
Pinus TATAGTGCT-TAACCTC--TTTCCATTAAAACAAATGCC
Spinach TGAATAGACTACTTATTTTTTCTTCAATTAAATGCC
Tobacco TGAAATATAGTA-TTTAGTTCTTTCTTCAATTAAATGCC
Rice TGTAGTTTCTTACCTTA--AATTAAATAATTAAATCTAATATG
Maize TGTAGTTTCTTACCTTA--AATTAAATAATTAAATCTAATATG
Arabidopsis TGAATAGAGAACTTCATTCTTTTCTTCAATTGCCT

FIG. 9

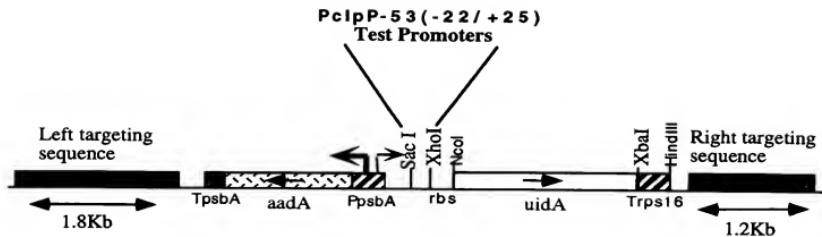


FIG. 10

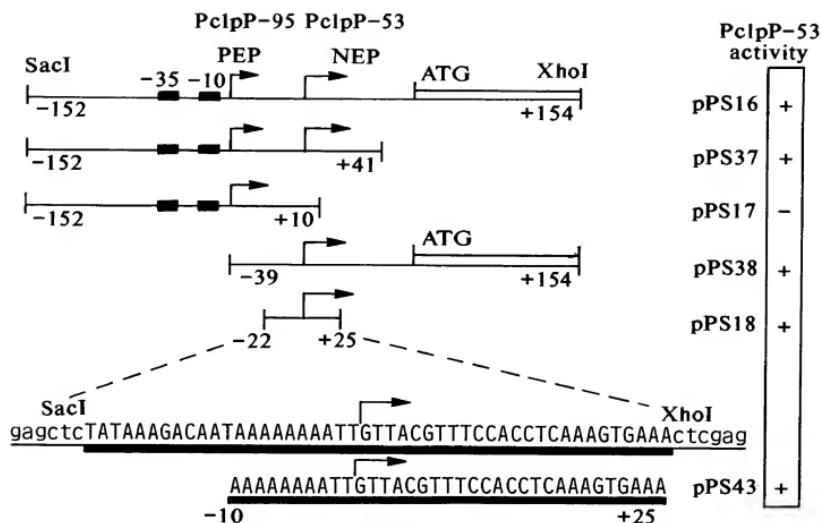


FIG 11

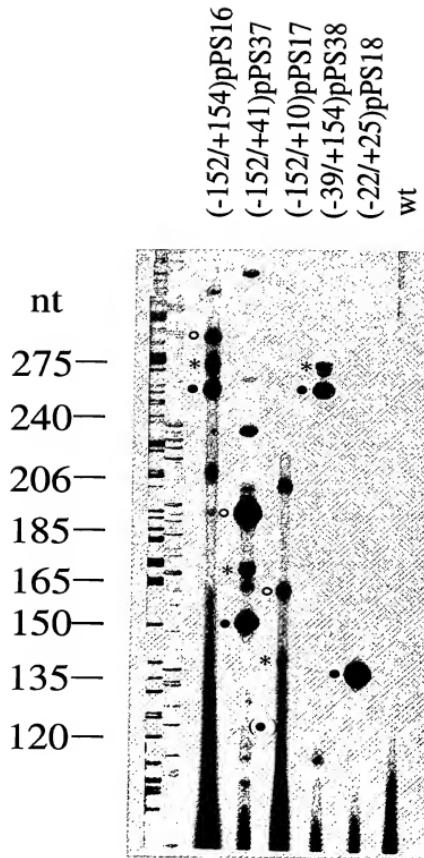


FIG. 12

SacI 74579 (c)

1 gagctcTATA AAGACAATAA AAAAAATTGT TACGTTCCA CCTCAAAGTG
■ 74533 (c)
51 AAActcgaga attcagttgt agggagggat ccATGGAACA AAAACTCATT
101 TCTGAAGAAG ACTTGgtacg tcctgttagaa accccaaccc gtcaaattcaa
151 aaaactcgac ggccctgtggg cattcagtct ggatcgcgaa aactgtggaa
201 ttgatcagcg ttggtggaa agcgcgttac aagaaaagccg gcaattgt
251 gtgcaggca gtttaacga tcagttcgcc gatcagata ttcgtatta
301 tgcgggcaac gtctggtatac agcgcgaagt cttaataccg aaaggttggg
351 cagggccagcg tatcgtgctg cgtttcgatg cggtaactca ttacggcaaa
401 gtgtgggtca ataatcagga agtgatggag catcaggcg gctatacgc
451 atttgaagcc gatgtcacgc cgtatgttat tgccggaaa agtgtacgta
501 tcaccgtttg tgtgaacaac gaactgaact ggcagactat cccggccgggaa
551 atggtgatta ccgacgaaaa cggcaagaaaa aagcagtctt acttccatga
601 tttcttaac tatgccggaa tccatcgac cgtaatgctc tacaccacgc
651 cgaacacactg ggtggacgat atcaccgtgg tgacgcgtt cgcgcaagac
701 tgtaaccacg cgtctgttga ctggcaggtg gtggccaatg gtatgtcat
751 cggtgaactg cgtatgcgg atcaacaggt ggttgcact ggacaaggca
801 ctagcgggac tttgcaagtg gtgaatccgc acctctggca accgggtgaa
851 ggttatctct atgaactgtg cgtcacagcc aaaagccaga cagagtgtga
901 tatctaccccg cttcgctcg gcatccggtc agtggcagtg aagggccaac
951 agttcctgat taaccacaaa ccgttctact ttactggctt tggtcgat
1001 gaagatgcgg acttacgtgg caaaggattc gataacgtgc tgatggcga

FIG. 13A

1051 cgaccacgca ttaatggact ggattggggc caactcctac cgtacccgc
1101 attaccctta cgctgaagag atgctcgact gggcagatga acatggcat
1151 gtggtgattg atgaaaactgc tgctgtcggc tttaacctct cttaggcata
1201 tggtttcgaa gcgggcaaca agccgaaaga actgtacagc gaagaggcag
1251 tcaacgggaa aactcagcaa ggcgcacttac aggccattaa agagctgata
1301 ggcgcgtgaca aaaaccaccc aagcgtggtg atgtggagta ttgccaacga
1351 accggatacc cgtccgcaag tgcacggaa tatttcgcca ctggcggaaag
1401 caacgcgtaa actcgaccgg acgcgtccga tcacccgttcaatgtat
1451 ttctgcgacg ctcacaccga taccatcagc gatcttttgc atgtgtgt
1501 cctgaaccgt tattacggat ggtatgtcca aagccggcat ttggaaacgg
1551 cagagaaggt actggaaaaaa gaacttcgtt cctggcagga gaaactgcat
1601 cagccgatta tcatcaccga atacggcggt gatacgtag ccgggctgca
1651 ctcacatgtac accgcacatgt ggagtgaaga gtatcgtgt gcatggctgg
1701 atatgtatca cccgcgttgc gatcgctca ggcgcgttgtt cggtaacacg
1751 gtatggaaatt tcggcgattt tgccgacccgtt caaggcatat tgccgcgttgg
1801 cggtaacaag aaaggggatct tcaactcgca ccgcacaaacgg aagtcggcg
1851 cttttctgct gcaaaaacgc tggactggca tgaacttcgg tggaaaaacgg
1901 cagcaggag gcaaaacaatg aatcaacaaac tctccctggcg caccatcg
1951 ggctacagcc tcgggtggggaa attgcgtttatg **5087 (c)** aGAAATTCAA TTAAGGGAAAT
2001 AAATTAAGGA AATACAAAAA GGGGGGTAGT CATTGTATA TAACTTTGTA
2051 TGACTTTCT CTTCTATTTT TTTGTATTC CTCCCTTTCC TTTCTATTT
2101 GTATTTTTT ATCATTGCTT CCATTGAATT aattcaacgt & HindIII

FIG. 13B

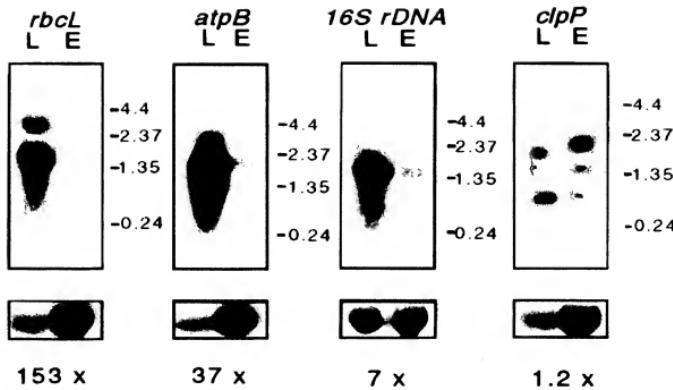


FIG. 14

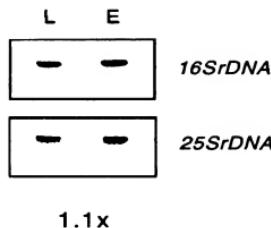


FIG 15

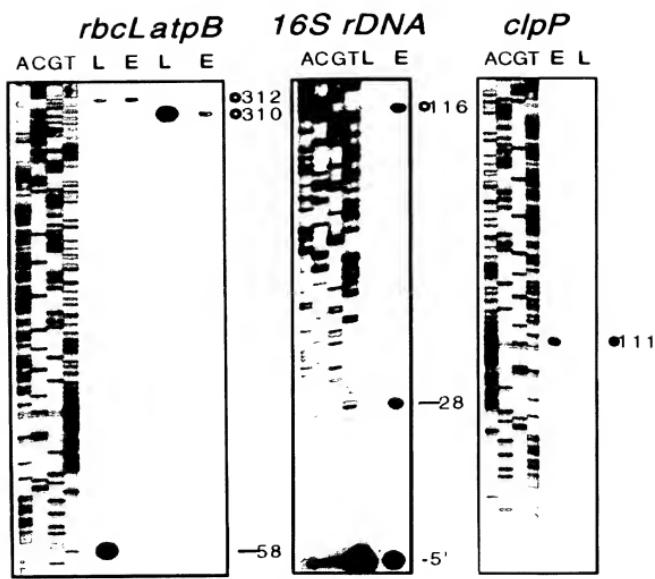


FIG. 16

16SrDNA

maize	CACACGATCGAACGGGAATGGATA	GAGGCTTGTGGGATTGACGTGATA
rice	CCACGATCGAACGGGAATGGATA	GAGGCTTGTGGGATTGACGTGATA
	-117○	
maize	GGGTAGGGTTGGCTATACTGCTGGTGGCGA	ACTCCAGGCTAATAATCTGA
rice	GGGTAGGGTTGGCTATACTGCTGGTGGCGA	ACTCCAGGCTAATAATCTGA
	-116○	
maize	AGCGCATGGATACAAGTTACCTTGGAAAGGAAAGACA	ATCCGAATCCGC
rice	AGCGCATGGATACAAGTTACCTTGGAAAGGAAAGACA	ATCCGAATCCGC
	-30	
maize	TTTGCTACGAATAAGGAAGCTATAAGTAATGCAACTATGA	AATCTCATGG
rice	TTTGCTACGAATAAGGAAGCTATAAGTAATGCAACTATGA	AATCTCATGG
	-28	

FIG. 17A

clpP

maize	TATAGTATTCTTATAGAATAAGAAAAAAA	AAATGAAGATAATAAAACTGCC
rice	TATAGTATTCTTATAGAATAAGAAAAAAA	CCTGAATAATAAAACTGCC
	-111●	

FIG. 17B